

which, from the projection of the *ocularium*, has somewhat of resemblance to a bird's beak, and is confined to the reign of Henry VI.—The paper contained an elaborate detail of the ornamental portion of this monument. At the conclusion of the paper, in reference to the renowned Earl, Sir Samuel observes,—"In all his charters he styled himself *Ricardus de Beauchamp, comes de Warrewyk, et de Aumarke, Seigneur l'Isle, et capitaine de Rouen*. I will merely add that, in what was at that time regarded as the greatest proof of religion, he was no less liberal, for he founded, beside the chantry chapel at Warwick, one at Guy's Cliffe, near that town, and a college at Elmley, in Worcestershire."

The tomb on which this armour lies is very beautiful: it has a series of niches upon it filled with figures of "luten," gilt, of admirable design and workmanship.

The next paper is one that was contributed by Mr. John Green Waller,

ON THE MONUMENTAL BRASS OF THOMAS, EARL OF BEAUCHAMP, AND LADY, IN WARWICK CHURCH.

It commenced by saying that, as Warwick contained, among its monumental antiquities, one of the finest effigies in the kingdom, so also it possessed a unique brass, in that to the memory of Thomas de Beauchamp, Earl of Warwick, and his lady, the daughter of — Ferrers. Previous to the partial destruction of the Church of St. Mary by fire, in 1694, the monument to the above mentioned consisted of an altar-tomb, with horizontal canopy, and enriched with many heraldic achievements. The brasses were inlaid upon the slab of the table-tomb, and formerly consisted of two figures under canopies, with some shields of arms. The present remains are the figures only, now fixed against the wall, and beneath them a modern inscription. The peculiarity which authorized him (Mr. W.) to pronounce the brass an unique specimen was, in its presenting an example of *pounced* or *punctured* work, probably in imitation of embroidery, and which formed a beautiful diaper to the heraldic bearings, and other parts of the figures. It was to this feature that he would particularly direct the attention of the members; and the inhabitants of Warwick, as the brass, in its present state, being so thickly covered with successive coatings of gilding, required minute inspection before ornamentation could be discovered. *Pounced* work,—in French, *poinçonné*, or *pointonné*; in Latin *punctatum*,—was a kind of ornament formed by *puncturing*, or pricking a surface with a point, and had been chiefly used in making diaper patterns in goldsmiths' work. Thus, in old inventions, we frequently find it applied to articles of plate: in the will of Joan, Lady Bergavenny, dated 1434, was, "my round basin of silver *poinçonné*." It occurred also, in the inventory of Sir John Fastolf's effects, and even in that of Cardinal Wolsey. *Pounced* work was also of very frequent occurrence in the back grounds of richly illuminated MSS. of the fourteenth century—a very fine example was in the Arundel collection, No. 82, in the British Museum. It was also said to be found in the gilding of some parts of the Coronation Chair. But the occurrence of this work in monumental remains is very rare, only two examples being known in this country, viz., the monument of Richard II. and his Queen, in Westminster Abbey, and the brass of Thomas de Beauchamp, Earl of Warwick, now under notice. *Punctured* work, indeed, might be found in several brasses, but it was of a different character, and not applied to the purpose of ornamentation. Mr. W. found an example at Baden Baden, in a monument to Frederic, Bishop of Utrecht, who died in 1517. He is represented in armour, over which was a cope decorated with *pouncing*. These were the only examples he (Mr. W.) was at present aware of. The value, then, of this brass, as a specimen of monumental art, was not exceeded by any in the kingdom, and in respect to the work alluded to, he believed there was not another in existence. He would now point out those parts of the figures which were decorated in the manner alluded to, and for better illustration had sent a plate of the monument published in the work of the association. On the figure of the knight—the

heraldic charges on his emblazoned jupon,—the fesse and crosslets being gold, were dispersed; the fesse was a particularly beautiful specimen. On the circular plates which protected the junctures of the elbow-pieces, or *coudes*, the badge of the *ragged staff*—the same was to be observed on the pomel of the sword, and was continued, also, on the scabbard, alternately with a *spring of flower*. The scabbard of the dagger was also dispersed, and the bear at the earl's feet had its hairy skin represented in punctured lines. The figure of the countess bore the arms of Ferrers, seven masles, on her gown, all of which were most elegantly dispersed, and on her mantle she bore the arms of Beauchamp, worked in a similar manner, and an ornamental border of the same round both garments. It was unnecessary to give a further description of the monument, his (Mr. W.) object being merely to point it out as one deserving of the greatest attention; but before leaving the subject, he would advert to its present unsatisfactory condition. "It is now covered with gilding, as I have before stated, and to such a degree, that it is difficult to make out the lines of the figures, still less the *pounced* work just noticed. I would, therefore, direct the attention of the inhabitants of Warwick, and those especially interested in its monumental antiquities, to the fact of this excessive gilding concealing the most important portion of the figures, and strongly advise its immediate removal. That the brass was originally gilt is very probable, but it would have been very thinly laid on; at all events, it would be far preferable to have it entirely removed, than that it should remain, to the detriment of the monument."

At the same meeting whereat the foregoing communication was read, Mr. Thomas Wright, A.M., one of the secretaries, submitted the following

NOTES RELATIVE TO ARCHITECTURE AND BUILDING, FROM MEDIEVAL MANUSCRIPTS.

"It was my intention to collect together a few notes from medieval manuscripts, illustrative of the arts of building and architecture among our forefathers, chiefly with the object of shewing how necessary it is, that those who would thoroughly understand the state of art and science in past times should make an extensive study of the literature of the age. That study is now rendered far more easy than it was, by the number of publications of old writings which have issued from the press during the last few years, and by the numerous helps which are now within the reach of all. In writings of a miscellaneous kind we often find precious scraps of information, which explain at once circumstances that have without them elicited the vain conjectures of a succession of modern writers.

Circumstances have hindered me from putting my intention fully into effect, and I therefore confine myself to pointing out two rather curious passages from the writings of Alexander Neckam, one of our most popular early, scientific, and educational writers, who was born in 1157, and died in 1217.

In a vocabulary, compiled by this writer for the purpose of teaching Latin to young scholars, published under the title of *Summa Alexandri Neckam de Nominibus Utensilium* (of which there is an imperfect copy in the British Museum, MS. Cotton. Titus D. XX.), Neckam describes in orderly arrangement all the different articles which came under common observation, in order to give their Latin names, which are often explained by an inter-linear gloss in Anglo-Norman. In one part he gives a brief account of the process of constructing an Anglo-Norman castle, which I think will be considered as possessing some curiosity." Mr. Wright then gave some extracts which may be thus translated. "If a castle is to be properly constructed, let it be surrounded by a double foss, and let the site of the place be strong by nature, so that the motte (or mound) may have a convenient support upon the native rock, or in default of natural advantage let the assistance of art be called in, that the mass of the wall constructed of mortar and stones may rise to a lofty work.

Upon this, let there be raised a rough hedge, which must be well defended with quadrangular stakes and sharp thorn bushes. Afterwards let the vallum be separated by large spaces, and let the foundation of the wall be

joined into the native rock. Let the high walls be supported externally by columns (i.e. buttresses). And let the surface of the wall be made fair with a trowel, and have the smoothness of mason's work. The embrasures of the battlements must be separated by equal distances. The battlements must defend the tower, placed on an elevated spot, nor must there be wanting scaffolding to sustain the stones to be thrown (at the enemy)."

Neckam goes on to describe how the castle is to be stored with provisions and arms, and how it is to be put in a posture of defence, in case of threatened attack.

We have no perfect castles of the period to which this description belongs, and I think that it contains information which may help to set at rest one or two disputed questions relating to military architecture.

In another and much larger work of Neckam's, a kind of encyclopediac treatise, *De Naturis Rerum*, of which there is a fine manuscript in the British Museum (MS. Reg. 12, G. xi. fol. 79, v.), we have a chapter (cap. clxix.) *De edificis*.

The reader gave a quotation from this work, which has been thus translated:—"Let the face of the area be levelled with the roller, and let the inequalities of the surface be overcome by frequent blows of the beetle, and then let the solidity of the foundation be tried by stakes driven into the bowels of the earth. The wall next rises up, constructed with mortar and stone, according to the law of the level and plummet. And let the exterior of the wall be made smooth and even with the mason's growel. But it is to be known that no walls, even when constructed of wooden laths, make equidistant lines. For let it be, that wooden walls be so constructed proportionally that they are not of greater thickness at the bottom than at the top, still the surfaces will not be equidistant.

For it necessarily should be, that the higher the walls rise from the ground, the greater distance be found between them. For since every heavy body naturally tends to a centre, you must understand that the walls tend to the centre of the earth, and you will find that the walls make an angle together. Do not you see how the rays proceeding from the axle of a cart are at a greater or less distance from each other until they join the circle of the wheel? So are the walls raised up towards the convex of heaven. A ceiling is placed on them, which must be kept clear of moths and webs. What shall I say of the ornaments of the ceilings and the paintings of the walls, except that riches produce folly?"

We have here the process of building a house, as we had before that of building a castle, and it is equally interesting in its details. But by far the most remarkable circumstance connected with it is the reason given for making the walls lean outwardly, because, since every heavy body tends to a centre, they ought to represent the radii of the earth. This principle, that every heavy body tends to a centre, is spoken of as one known to every body. We have thus revealed to us the extraordinary fact, that the doctrine of gravitation was known to Englishmen of science full 500 years before it was discovered by Newton!"

Who has not heard of

RENILWORTH.

The genius of Scott has made it a shrine for pilgrims from all nations. All who have wept over the sorrows of sweet Amy Robsart and shuddered at the villanies of Varney walk round the massive structure, now 'rest of all its ancient glory, with feelings of awakened interest. Apart from this charm which has been thrown over it, and from the beauty of the ruin and its position, it has great value in an architectural and archaeological point of view, and was of course visited by the association. Founded by Geoffrey de Clinton, a Norman adherent of Henry I., the keep erected by him, and called, like so many other structures of that period, Caesar's Tower, still remains, and though

"Where mighty towers
Uprais'd their heads in conscious pride of
strength,
Are amould'ring walls and tottering battlements,"